REMARKS/ARGUMENTS

Applicants thank the Examiner for his careful review of this application. Claims 1, 4, 6 and 7 have been amended. Claims 1-7 remain pending. Applicants respectfully request reconsideration of the application in view of the above amendment and the following remarks submitted in support thereof.

Rejections under 35 U.S.C. §102:

The Examiner rejected claims 1-7 under 35 U.S.C. §102(b), as being anticipated by Oberman et al. (US Pat. 6,298,367). The rejection is respectfully traversed. The teachings of Oberman et al. do not show the currently claimed invention of independent claim 1. Independent claim 1 defines a processor that provides parallelism in a floating point adder unit. Parallelism is accomplished by having a correct rounding choice calculated using an end-around-carry (EAC) value before the adder unit has finished adding the mantissa portions of the floating points. This way the choice is made in parallel with the addition.

In contrast, Oberman et al. makes the rounding choice in sequence with the adder. According to Oberman, the GRS logic unit generates guard, round, and sticky bits (GRS) corresponding to the smaller mantissa value. These bit values are forwarded to selection unit 350 for rounding computation (column 18, lines 23-27). In Oberman et al. the rounding choice is made in the selection unit 350 (*see* Fig. 9). Selection unit includes selection logic block 510 A-D. Selection unit receives inputs received from units 320 (GRS logic) and 340 (adder unit) (column 20, lines 1,-3). The selection sub-blocks 510A-D speculatively calculate selection values (column 20, lines 26-27). It is clear from Figures 6 and 9 that the selection unit receives input from the adder and a selection is made after the adder has completed its operation.

It is emphasized that Oberman et al. does not teach a parallel method (as claimed), and instead the addition of the mantissas and the rounding choice is done in stages. This teaching is evident from Figures 6 and 9. Accordingly, the Applicants respectfully request that the Examiner withdraw the 35 U.S.C. § 102(b) rejection of claim 1.

To establish a *prima facie* case of obviousness, the prior art reference must teach or suggest all the claim limitations (see MPEP2143). As can be seen from above, Oberman et al. does not teach all the features of the claimed invention. Since dependent claims 2-3 directly depend from independent claim 1, Applicants submit that the dependent claims are patentable under 35 U.S.C. §102(b) for the reasons set forth above. Therefore, Applicants respectfully request the Examiner to withdraw the 35 U.S.C. §102(b) rejection of claims 1-3.

Independent claim 4 was rejected under 35 U.S.C. §102(b), as being anticipated by Oberman et al. Applicants respectfully traverse the rejection. In support of the obviousness rejection, the Examiner noted that Oberman et al. teaches a machine readable medium where floating point values are sent to a floating point execution unit and to a compare unit in parallel where the compare unit and the floating point execution unit are operatively coupled to an EAC value calculator. As described above, Oberman doesn't perform a rounding choice in parallel with the execution unit. The rounding choice is done by the selection unit which makes a selection subsequent to the floating point execution.

In contrast, independent claim 4, as amended further includes a rounding calculator operatively coupled to the end-around-carry value calculator. The rounding calculator makes a rounding choice prior to having the mantissa adder performing the subtraction. Therefore, Applicants respectfully request the Examiner to withdraw the 35 U.S.C. §102(b) rejection of claim 4.

Similarly, independent claims 5, 6 and 7 all include an operation where a rounding choice is made prior to having the subtraction completed. Accordingly, Applicants submit that the independent claims 5, 6, and 7 are patentable under 35 U.S.C. §102(b) for the reasons set forth above.

Conclusion

In view of the foregoing, the Applicants respectfully submit that all the pending claims 1-7 are in condition for allowance. Accordingly, a Notice of Allowance is respectfully requested. If the Examiner has any questions concerning the present Amendment, the Examiner is requested to contact the undersigned at (408) 749-6903. If any additional fees are due in connection with filing this Amendment, the Commissioner is also authorized to charge Deposit Account No. 50-0805 (Order No. SUNMP285). A duplicate copy of the transmittal is enclosed for this purpose.

Respectfully submitted,
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